Remarks

Claims 1-20 are at issue. Claims 17 & 20 stand rejected under 35 USC 102(e) as being anticipated by Schipper et al (6088650). Claims 1-16, 18, &19 stand rejected under 35 USC 103(a) as being unpatentable over Lightner et al in view of Schipper et al.

The present invention uses **"speed"** data to determine distance or odometer data. This increases the accuracy in the case of a GPS system and reduces the amount CPU processing. The Examiner states that Schipper et al show the use of speed data, but this is clearly incorrect. The Examiner points to Col. 4, lines 1-30. However a careful reading of this section shows that Schipper suggests two measurement processes. The first process is "the LD system 13 is programmed (1) to determine its own spatial location coordinates, at each of a sequence of approximately uniformly spaced times to determine cumulative distance." See Col 3, line 64 – Col. 4, line 1. The second approach is "the LD system compares the cumulative distance with a conventional odometer and or speedometer reading." Col. 4, lines 12-14. Clearly, Schipper is not receiving "speed" data from GPS (LD system). Thus Schipper teaches away from the present invention.

The Examiner seems to imply incorrectly that GPS uses exact time measurements and known locations to determine speed. This is incorrect the speed from a GPS receive is calculated using the **Doppler shift.** This is why the present application states that the speed sensor could be radar of laser speed-measuring device. This is also why the speed data provides a more accurate measurement of distance at slow speeds. See page 1, lines 21-24 and page 7, lines 14-16. As a result, there is no need to know the location or time intervals to determine speed.

Claim 1 requires that the processor convert the speed signal into an odometer data. The reasons for this include reducing the memory requirements (See page 8, lines 19-21), processor efficiency (see page 7, lines 1-4) and because of the inaccuracy of GPS and related devices over short distances and low speeds (See page 7, lines 14-16). The Examiner states that Schipper et al show the used of speed data, but this is

clearly incorrect. The Examiner points to Col. 4, lines 1-30. However a careful reading of this section shows that Schipper suggests two measurement processes. The first process is "the LD system 13 is programmed (1) to determine its own spatial location coordinates, at each of a sequence of approximately uniformly spaced times to determine cumulative distance." See Col 3, line 64 – Col. 4, line 1. The second approach is "the LD system compares the cumulative distance with a conventional odometer and or speedometer reading." Col. 4, lines 12-14. Clearly, Schipper is not receiving "speed" data from GPS (LD system). Claim 1 is allowable.

Claims 2 & 4 are allowable as being dependent upon an allowable base claim.

Claim 3 requires an algorithm that converts speed data into odometer data. This is not shown in Schipper. At column 4, equations 1 & 2 show that Schipper is using location data to calculate the odometer data. This introduces a number of errors particularly at lower speeds (See page 7, lines 14-16). Claim 3 is clearly allowable.

Claim 5 requires that the processor convert the speed signal into an odometer data. The reasons for this include reducing the memory requirements (See page 8, lines 19-21), processor efficiency (see page 7, lines 1-4) and because of the inaccuracy of GPS and related devices over short distances and low speeds (See page 7, lines 14-16). Lightner and Schipper do not convert a speed signal into odometer data. Claim 5 is allowable.

Claim 6 requires multiplying multiple speed data by a time factor to determine a distance. Schipper shows by equations 1 & 2 that he determines distance by comparing location data. Claim 6 is allowable over the prior art.

Claim 7 is allowable for the same reasons as claim 6.

Claims 8 & 9 are allowable as being dependent upon an allowable base claim.

Claim 17 requires that the processor convert the speed signal into an odometer data. The reasons for this include reducing the memory requirements (See page 8, lines 19-21), processor efficiency (see page 7, lines 1-4) and because of the inaccuracy of GPS and related devices over short distances and low speeds (See page 7, lines 14-16). The Examiner states that Schipper et al show the used of speed data, but this is clearly incorrect. The Examiner points to Col. 4, lines 1-30. However a careful reading of this section shows that Schipper suggests two measurement processes. The first process is "the LD system 13 is programmed (1) to determine its own spatial location

coordinates, at each of a sequence of approximately uniformly spaced times to determine cumulative distance." See Col 3, line 64 – Col. 4, line 1. The second approach is "the LD system compares the cumulative distance with a conventional odometer and or speedometer reading." Col. 4, lines 12-14. Clearly, Schipper is not receiving "speed" data from GPS (LD system). Claim 17 is allowable.

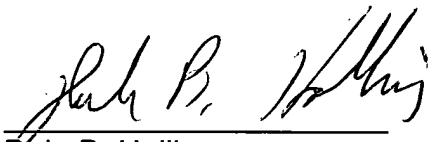
Claims 18 & 19 are allowable as being dependent upon an allowable base claim.

Claim 20 requires determining when the GPS signal is lost. Schipper never discusses losing the LD signal. The Examiner has not pointed to where he believes this is shown in Schipper. Claim 20 is clearly allowable.

The application is now in condition for allowance. Prompt reconsideration and allowance are respectfully requested.

Respectfully submitted,

(McDermott et al.)

By 

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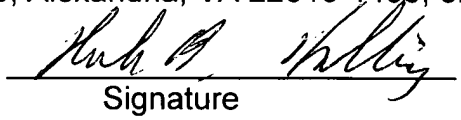
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